



LACTORYZOL

Rice Based Postbiotic Active
For Sensitive & Distressed Skin



BioAktive

Specialty Products

www.bio-aktive.com

Real Efficacy

Backed by In-Vivo Testing

Moisturization

Reduced Skin Irritation

Wrinkle Reduction

Smoother Firmer Skin

Enhanced Skin Penetration



MICROBIOME HEALTH

Our skin is home to millions of bacteria, fungi and viruses that play essential roles in the health of our skin and body.

Lactoryzol is a Postbiotic Active made through the fermentation of a high-quality rice by selected lactobacillus Strains

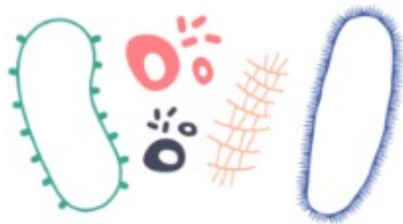
Microbiota, fragments and metabolites to restore balance to your skin's microbiome and support its health



Intact inanimate microbial cells



Metabolites & End-products



Microbial fragments & structures

MICROBIOTIC INGREDIENTS

WHAT IS A POSTBIOTIC?

Probiotics

Good Bacteria and Other Microbiota that support a healthy balanced environment and positive outcomes for your body and skin

Prebiotics

Nutrients and feed that support probiotics in the body and on the skin

Postbiotics

The compounds and substances that are produced by probiotic organisms in the microbiome that are beneficial to the skin and body, not living microorganisms

Producing postbiotics are what probiotics are supposed to do in the microbiome

Benefits of Postbiotics

- Immune support
- Prevent inflammation
- Have anticarcinogenic qualities
- Antimicrobial and can prevent infections
- Can support oxytocin formation
- Safe and low risk



The Best Rice in All of China

DONGBEI WUCHENG DAMI – China's Best Rice
Best taste and texture

Only grown during one season per year in North
China

Lactoryzol is NOT Rice Water

**Lactoryzol is made through Mash
Fermentation of Rice and Water**

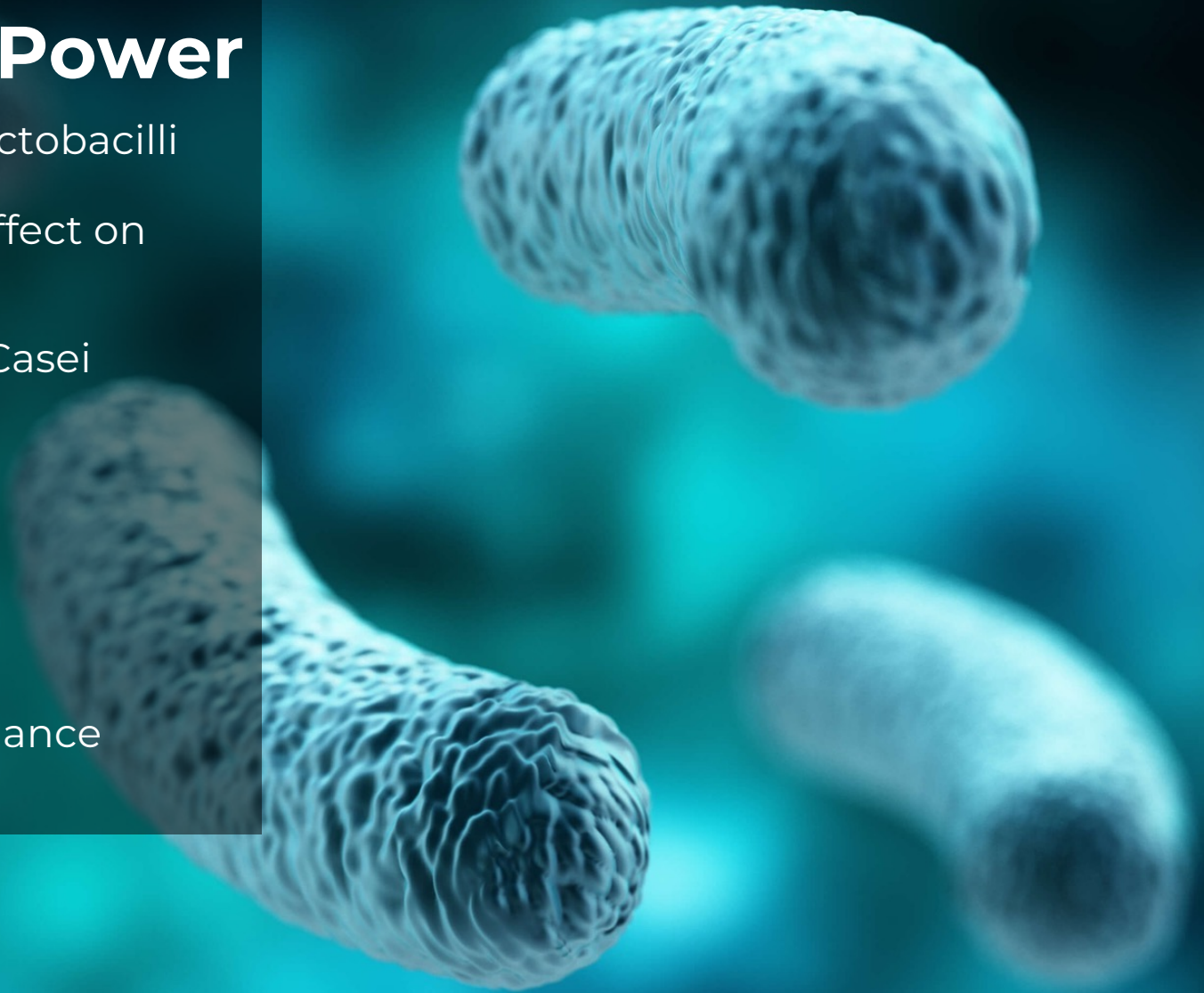
Lactobacillus Power

The science shows that lactobacilli produce a wide variety of molecules with positive effect on the body and skin.

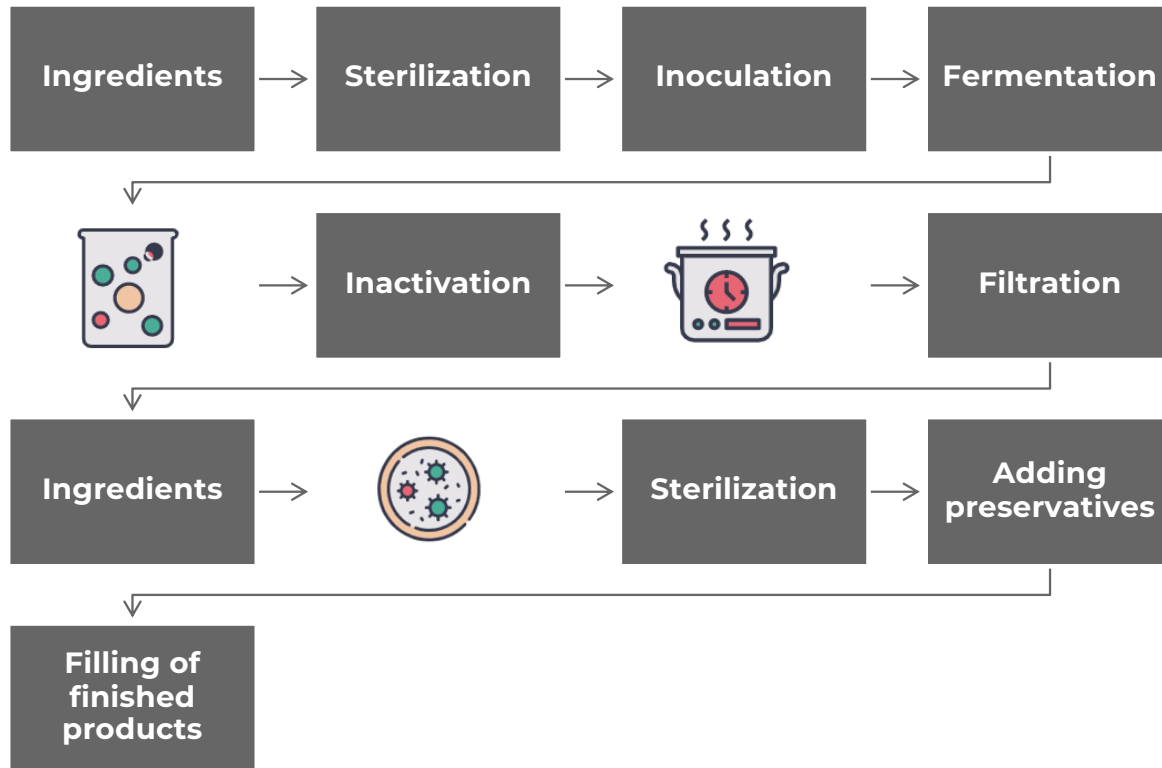
5 strains of Lactobacillus Casei

- *Lactobacillus casei* Shirota
- *Lactobacillus casei* DN-114001
- *Lactobacillus casei* Lbc80r
- *Lactobacillus casei* ATCC 334
- *Lactobacillus casei* TISTR 1500

Selected for their performance through copious lab work



Manufacturing Process



1kg of rice is added to 10kg of pure water, and 10^{11} CFU of bacteria are added to obtain 9kg of product through fermentation.





Bioactive Components

Bioactive Components

Y-Oryzanol

Inhibits the formation, operation and diffusion of melanin, for anti-blotching and lightening effect.

Rice Bran sterol

An antioxidant that promotes skin metabolism, inhibits skin inflammation, and reduce the effects of erythema and skin-aging.

Proanthocyanidins

Polyphenol flavonoids with antioxidant effect found in plants such as rice.

Based on scientific literature

In Vivo Data

We ran a series of four In Vivo tests to gage the efficacy of Lactoryzol

Each test included 30-40 Volunteers

Volunteers ranged in age from 22 – 54 years old

Volunteers were divided into a placebo group and an experimental group.



Moisturization

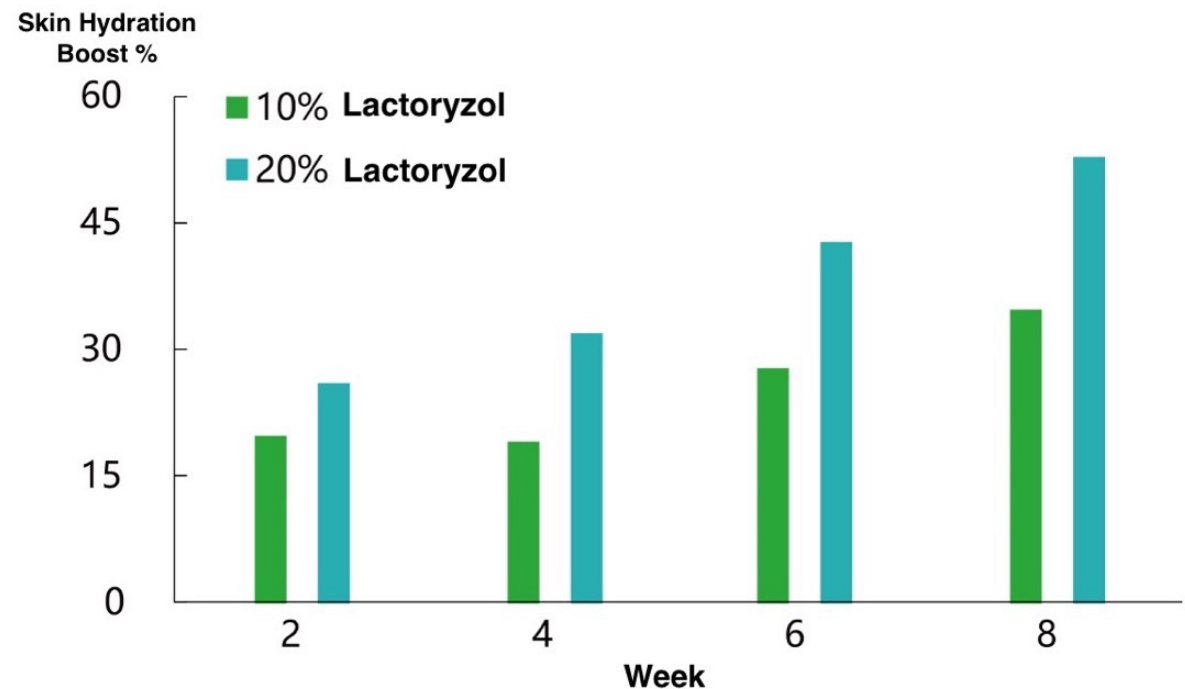
In tests designed to measure moisturization, findings showed that Lactoryzol can significantly improve the hydration of the skin.

Volunteers were given a simple emulsion containing 5% and 10% Lactoryzol by content respectively.

Over an 8 weeks period the emulsion was applied twice daily.

Measurements were taken every two weeks.

Conclusion: The skin hydration of the experimental groups increased by 20%-35% and 25%-56%, respectively as compared to the placebo.



Reduced Skin Irritation

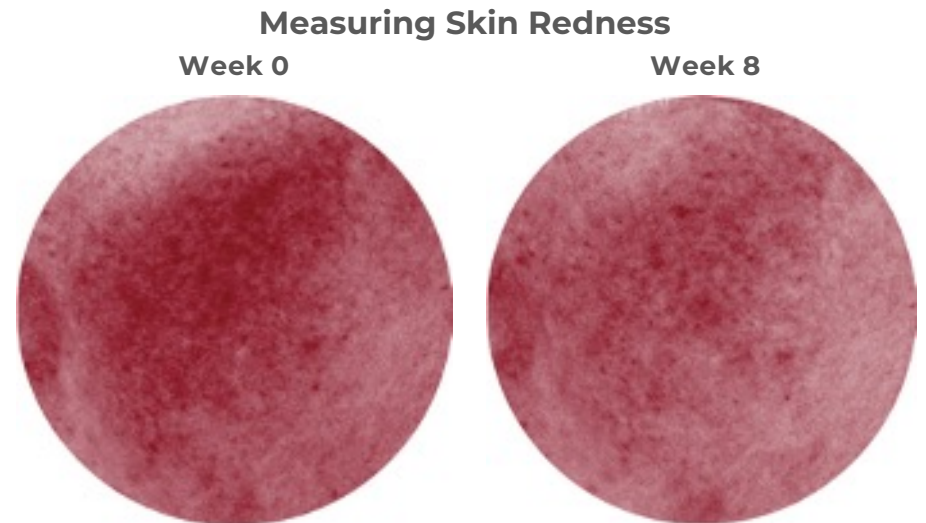
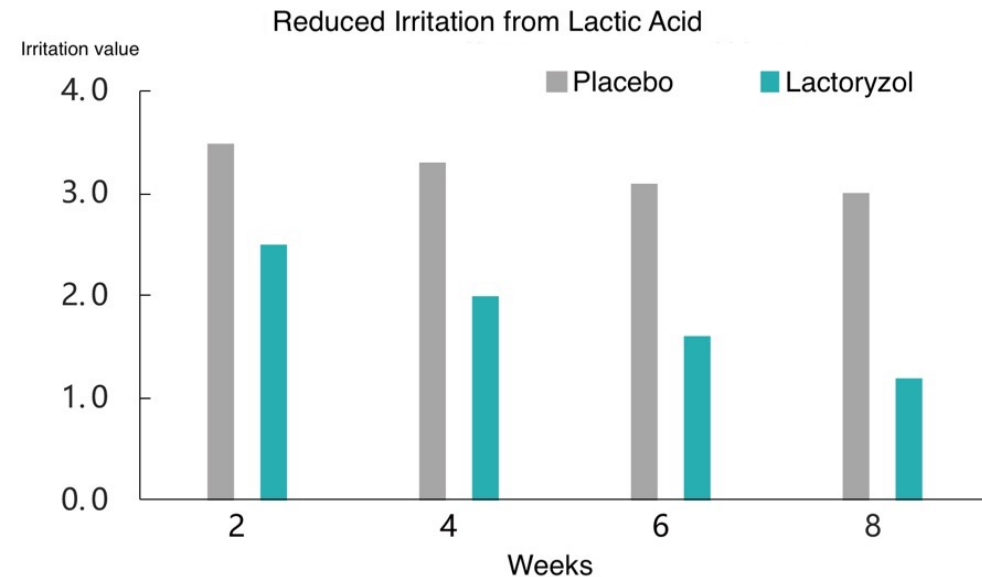
In tests designed to measure skin sensitivity, findings showed that Lactoryzol resulted in a significant decrease in skin sensitivity

Volunteers were divided into an experimental group and a placebo group. The experimental applied 5% Lactoryzol cream twice a day (in the morning and evening) over an 8 weeks period

After cleansing and resting, 50 μL of 10% lactic acid solution on 0.5cm diameter filter paper was applied to the nasolabial fold of the volunteer

Stinging sensation and skin reaction were observed with volunteers being questioned and rated on a 4 point system (0 no sting, 1 light sting, 2 mild sting, 3 moderate sting, 4 severe sting), and the index of skin sensitivity was evaluated

Conclusion: Using Lactoryzol resulted in a decrease of skin sensitivity by 20%-45%, based on the decrease in stinging from the application of lactic acid. In addition, volunteers with sensitive skin showed significant reduction in skin redness after application of the lactic acid solution



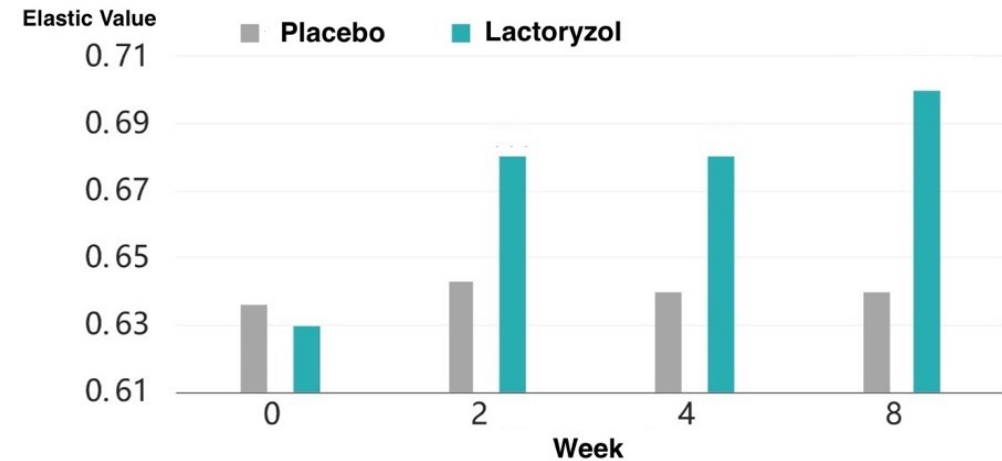
Wrinkles, Elasticity and Firmness

In tests designed to measure the effect Lactoryzol of on wrinkles and skin elasticity, findings showed a significant reduction in the number of wrinkles and an increase in skin smoothness

Volunteers were divided into an experimental group and a placebo group. The experimental applied 5% Lactoryzol cream twice a day (in the morning and evening) over an 8 weeks period

Conclusion: Using Lactoryzol resulted in a dramatic reduction in the number of wrinkles ranging from 8.0-30% with a significant improvement in skin elasticity value. Fine lines were stretched and flattened and the volunteers skin was firmer and smoother after use.

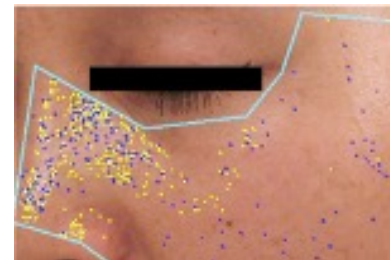
Eye Skin Elasticity Test



Week 0



Week 8



Delivery Support & Skin Penetration

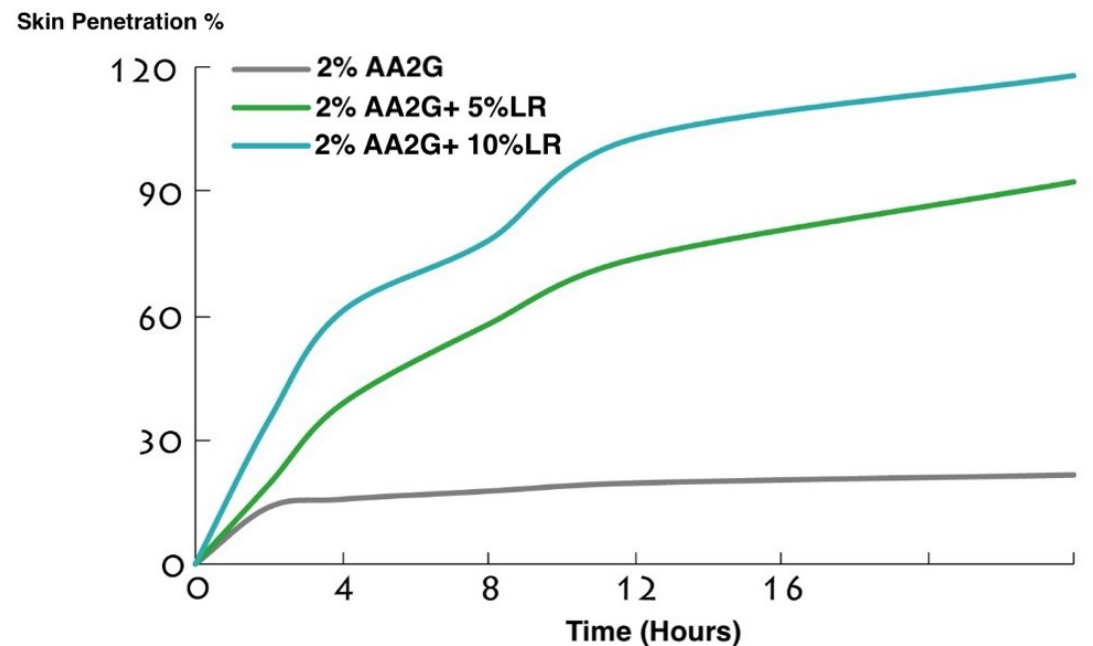
In tests designed to evaluate the potential role Lactoryzol can play in skin penetration, it shows strong data demonstrating its potential for use in supporting transdermal absorption of effective and active substances

The transdermal test was conducted using an in vitro three-dimensional skin model

2.0% ascorbyl glucoside physiological saline solution was used as a blank control and 5% and 10% Lactoryzol were tested for transdermal absorption of ascorbyl glucoside (AA2G) using high-performance liquid

The content of ascorbic acid was determined by chromatographic analysis.

Conclusion: Lactoryzol has an excellent promoting effect on the percutaneous absorption of ascorbyl glucoside, and it has a dose-dependent effect. This shows high potential as a penetration enhancer for skincare products and can promote the absorption of substances and can improve the efficacy of active ingredients in a formulation.



LACTORYZOL Technical Information

100% Active Formulation
Can replace against water

Recommended dosage: 1 - 5
% - Recommended for use
in body and facial care
products.

Packaging and storage:
25kg/drums (can be
customized)
Airtight storage at room
temperature,
shelf life of 1 year

Water soluble postbiotic active
Rice Fermentation Filtrate (Liquid ferment of Oryza Sativa)
5 Selected Strains of Lactobacillus casein
In-Vivo data shows skin protection and anti-inflammatory
properties

Ideal for sensitive and distressed skin
Mild and safe, promotes smooth, moist, delicate and elastic skin
Moisturization, anti-ageing, sensitive skin and skin protection
creams | essences | facial masks | serums | gels | lotions

INCI

- Lactobacillus/Rice Ferment
- Lactobacillus Ferment
- Butylene Glycol (and) 1,2-Hexanediol
- Hydroxyacetophenone



A Portfolio of Innovative
Plant Based Products.

Applications in Personal
Care and Cosmetics

Featured Products

LACTORYZOL

Postbiotic Active with proven skin protection for
microbiome health

NATRALITE

Plant Based Emollients with a Silicone Skin Feel

CASTORLINE

Natural Derived Vegan Alternative to Petrolatum

BIOAXTA

A Potent Antioxidant from Micro Algae

BioActive's full portfolio of products is available upon request

BSP
SOLUTIONS



BIOAKTIVE
GROUP INC

About us

BioActive Group is a US company operating at the intersection of chemistry and life sciences. We provide best in class ingredients and solutions for a range of industries and applications.

Our Brands

BioActive Specialty Products

A portfolio of innovative, functional, plant based products with applications in personal care and cosmetics.

BSP Sourcing

A trusted sourcing partner for chemicals, raw materials and life sciences.

BSP Solutions

Strategy driven research and operational solutions for pharmaceutical, life sciences & chemical related businesses. With a focus on China/Asia in-bound and out-bound business, we work with our customers to provide pragmatic support and actionable solutions.



Thank You For Your Time

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